Approved by OMB 3060-0678

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATIONEnter a description of this application to identify it on the main menu: **AMSS STA**

| Fax Number: | Phone Number: Fax Number: E-Mail: State: Zipcode: | ViaSat, Inc. 6155 El Camino Real Carlsbad USA Mr Daryl T Hunter |
|-------------|---|---|
| | | ViaSat, Inc. |

Call Sign 605714 Cord 1 + 525 - 574 20200204 -02177 | Frie # 565 - 574 20200204 -02177 | Call Sign 6050318 Grant Date 02/24/2020 | Or other identifier) | From: 03/4/2020 | Torm Dates | F

| 2. Contact | | | |
|--|---|---------------------------------|---|
| Name: | Steven | Phone Number: | 760-476-4812 |
| Company: | Viasat, Inc | Fax Number: | 760-929-3941 |
| Street: | 6155 El Camino Real | E-Mail: | steven.hemple@viasat.com |
| City: | Carlsbad | State: | CA |
| Country: | USA | Zipcode: | 92009 – |
| Attention: | | Relationship: | Engineer |
| (If your application is related to an application. Please enter only one.) 3. Reference File Number or Sub | If your application is related to an application filed with the Capplication. Please enter only one.) 3. Reference File Number or Submission ID IB2020000299 | the Commission, enter either th | (If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.) 3. Reference File Number or Submission ID IB2020000299 |
| 4a. Is a fee submitted v If Yes, complete and a Governmental Entity | 4a. Is a fee submitted with this application? If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114). Governmental Entity | ndicate reason for fee exemptic | on (see 47 C.F.R.Section 1.1114). |
| Other(please explain): | | | |
| 4b. Fee Classification | CGV - Fixed Satellite VSAT System | tem | |
| 5. Type Request | | | |
| Use Prior to Grant | | O Change Station Location | Other |
| 6. Requested Use Prior Date 03/14/2020 | Date | | |
| 7. City | | 8. Latitude (dd mm ss.s h) | 0.0 0.0 |
| | | | |

| 9. State | 10. Longitude (dd mm ss.s h) 0 0 0.0 |
|---|---|
| 11. Please supply any need attachments. Attachment 1: Exhibit A Attachment 2: | Attachment 3: |
| 12. Description. (If the complete description does not appear in thi | (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.) |
| See attached narrative | |
| 13. By checking Yes, the undersigned certifies that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti–Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application" for these purposes. | certifies that neither applicant nor any other party to the application is that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Act use of a conviction for possession or distribution of a controlled substance. g of "party to the application" for these purposes. |
| 14. Name of Person Signing Steven C. Hemple | 15. Title of Person Signing Engineer, Regulatory Affairs |
| WILLFUL FALSE STATEMENTS MADE ON THIS FOR (U.S. Code, Title 18, Section 1001), AND/OR R (U.S. Code, Title 47, Section 312(a)(1)), AND/ | IENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503). |

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060-0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS. have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the

Remember - You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060-0678. THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507. Applicant: ViaSat, Inc. Call Sign: E050318

File No.: SES-STA-20200204-00117 Special Temporary Authority ("STA")

ViaSat, Inc. ("ViaSat") is granted STA for 60 days to conduct testing, evaluation, and customer services during long-haul, international routes outside of CONUS using five (5) earth station aboard aircraft ("ESAA") KuKarray terminals in the 14000-14500 MH (Earth-to-space) and 11450-12200 MHz (space-to-Earth) frequency bands over the Pacific Ocean Region, Alaska, and Hawaii with Eutelsat 174A satellite at 174°W orbital location (Call Sign S2610); over the Gulf of Mexico, Latin America, and Caribbean region with SES-10 satellite (Call Sign S2950) at 67°W orbital location. Operations shall be under the following conditions:

- Operations shall not exceed parameters proposed in the pending modification application IBFS File No. SES-MFS-20200204-001122
- 2. Operations with the Eutelsat 174A satellite will be limited to the satellite's available frequencies 11450-11700 MHz and 12200 MHz (space-to-Earth).
- 3. Operations under this authority are on a non-interference basis only and non-protected basis only and while operating under this temporary authority, ViaSat must not cause harmful interference to, and must not claim protection from interference caused to it by, any other lawfully operating radio-communications systems. ViaSat must cease operations immediately upon notification of such interference and must immediately inform the Commission, in writing, of such an event.
- 4. Operation pursuant to this authorization must comply with the terms of the licensee's coordination agreements with the National Science Foundation and the National Aeronautics and Space Administration pertaining to operation of ESAA in the Ku-Band frequencies.
- 5. Operation pursuant to this authorization outside the United States in the 14.0-14.5 GHz band must be in compliance with the provisions of Annex 1, Part C of Recommendation ITU-R M.1643, with respect to any radio astronomy station performing observations in the 14.47-14.5 GHz band.
- 6. Operations pursuant to 47 C.F.R. $\S25.228$ (a),(b), (c),(g)(1)-(3),(j)(1).
- 7. Operation pursuant to this authorization must conform to the terms of coordination agreements between the operators of Eutelsat 174A and SES-10 satellites and operators of other Ku-band geostationary satellites within six angular degrees of Eutelsat 174A and SES-10 satellites. In the event that another GSO Fixed-Satellite Service (FSS) space station commences operation in the 14.0-14.5 GHz band at a location within six degrees of this space station, ESAAs operating pursuant to this temporary authority shall cease transmitting to that space station unless and until such operation has been coordinated with the new space

- station's operator or ViaSat demonstrates that such operation will not cause harmful interference to the new co-frequency space station.
- 8. The licensee shall ensure installation of terminals on aircraft by qualified installers who have an understanding of the antenna's radiation environment and the measures best suited to maximize protection of the general public and persons operating the aircraft and equipment. A terminal exhibiting radiation exposure levels exceeding 1.0 mW/cm2 in accessible areas, such as at the exterior surface of the radome, shall have a label attached to the surface of the terminal warning about the radiation hazard and shall include thereon a diagram showing the regions around the terminal where the radiation levels could exceed 1.0 mW/cm2.
- 9. Operations authorized herein must not be used to provide air traffic control communications.
- 10. ESAA (Ku-band frequencies only) on the ground must not transmit at elevation angles less than three degrees.
- 11. ViaSat shall comply with any pertinent limits established by the International Telecommunication Union to protect other services allocated internationally.
- 12. In connection with the provision of service in any particular country, ViaSat is obliged to comply with the applicable laws, regulations, rules, and licensing procedures of that country.
- 13. Operations of terminals shall not be within line-of-sight of TDRSS stations.
- 14. Grant of this authorization is without prejudice to any determination that the Commission may make regarding pending application IBFS File No. SES-MFS-20200204-001122.
- 15. Any action taken or expense incurred as a result of operations pursuant to this STA is solely at ViaSat's risk.
- 16. This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately. Petitions for reconsideration under Section 1.106 or applications for review under Sections 1.115 of the Commission's rules, 47 C.F.R. §§ 1.106, 1.115, may be filed within thirty days of the date of the public notice indicating that this action was taken.

GRANTED
International Bureau

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Grant Date 02 (24)

Approved: July 2020 10: 05/12/2020

Approved: July 2020 To: 05/12/2020

Description of Request for Special Temporary Authority

Viasat, Inc. ("Viasat") respectfully requests special temporary authority ("STA") to operate the Ku band aperture of the KuKarray antenna for up to five (5) earth stations mounted on aircraft ("ESAAs") in the 11.45-12.2 GHz and 14.0-14.5 GHz portions of the Ku band. These Ku band operations will occur in airspace outside of CONUS: (i) over the Pacific Ocean Region, Alaska and Hawaii using Eutelsat 174A at 174° W.L.¹ and (ii) over Latin America, Gulf of Mexico and the Caribbean using SES-10 at 67° W.L.² Viasat is simultaneously filing a modification application with the Commission for regular authority to add operations with the Ku band aperture of this antenna to Viasat's existing Ku band ESAA license, call sign E050318. Viasat requests STA pending Commission action on that modification application, for a period of 60 days commencing on or about March 14, 2020.

Grant of the requested STA will serve the public interest by allowing Viasat and its commercial airline customer to conduct acceptance testing and evaluation and to support the customer's roll-out of service. STA would allow Viasat and its customer to evaluate user demands for high-speed in-flight broadband services on long-haul, international routes outside of CONUS and to prove out the antenna and network capabilities under typical use cases prior to full deployment of this antenna model.

All of the relevant technical parameters for the proposed STA operations are provided in the pending modification application and are incorporated by reference in this request for STA. Viasat demonstrates in the modification application that the Ku band aperture of this antenna complies with the limits in Section 25.218(f), except for certain limited exceedances in the plane perpendicular to the GSO arc, for which Viasat has requested a waiver to the extent necessary. Viasat provided a detailed technical analysis demonstrating that the Ku band operations of this antenna are unlikely to cause harmful interference into NGSO systems, and that these exceedances are highly unlikely to be perceptible to such systems given the dynamic environment in which ESAAs and NGSO satellites operate, particularly given the limited number of units for which STA is requested and the limited number of Ku band NGSO satellites that may be operational during the STA period.

Viasat will operate pursuant to STA on a non-protected, non-harmful interference basis. Viasat will otherwise operate consistently with the terms and conditions set forth in its existing Ku band ESAA license, call sign E050318 and in compliance with the requirements of Section 25.228 applicable to ESAAs.

The U.S. point of contact available 24 hours a day, seven days a week, with authority and ability to cease all emissions from the ESIMs is:

349 Inverness Drive South Englewood, CO 80112 Tel: 720-493-7300

¹ See File No. SAT-PPL-20160117-00005, Call Sign S2950 (market access grant for SES-10).

² See File No. SAT-RPL-20170927-00136, Call Sign S2610 (authorization for Eutelsat 174A).